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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/660,312	10/660,312 09/11/2003		Michael Stanford Showell	9354	5410		
27752	7590	01/12/2006		EXAMINER			
		GAMBLE COMP	KUMAR, PREETI				
INTELLECTUAL PROPERTY DIVISION							
WINTON F	IILL TEC	HNICAL CENTER	ART UNIT	PAPER NUMBER			
6110 CENT	ER HILL	AVENUE	1751				
CINCINNA	TI, OH	45224 ·					

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-		Application No.	Applicant(s)					
		10/660,312	SHOWELL ET AI	SHOWELL ET AL.				
	Office Action Summary	Examiner	Art Unit					
		Preeti Kumar	1751					
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cover she	et with the correspondence a	ddress				
WHIC - External after - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPLICATION OF THE MAILING Ensions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statutely reply received by the Office later than three months after the mailined patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMM 136(a). In no event, however, r will apply and will expire SIX (6 e, cause the application to becc	UNICATION.  nay a reply be timely filed  ) MONTHS from the mailing date of this or the Management of the Management (35 U.S.C. § 133).	•				
Status								
1) 又	Responsive to communication(s) filed on 31 (	October 2005						
	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.							
/	,_	on for allowance except for formal matters, prosecution as to the merits is						
/	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims	, ,	,					
4)⊠	Claim(s) 1-17 is/are pending in the application	1						
	4a) Of the above claim(s) <u>1,3-7,9-11,13 and 15-17</u> is/are withdrawn from consideration.							
	Claim(s) is/are allowed.							
•	Claim(s) <u>2,8,12 and 14</u> is/are rejected.							
	•							
	Claim(s) are subject to restriction and/	or election requiremen	t					
	on Papers	or crossorr requirement						
	·							
	The specification is objected to by the Examin							
10)[]	The drawing(s) filed on is/are: a) acc	·	-					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
44)	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority ι	ınder 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
2) ☐ Notic 3) ⊠ Inforr	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 r No(s)/Mail Date <u>2/6/04, 2/16/05</u> .	Pape	view Summary (PTO-413) r No(s)/Mail Date e of Informal Patent Application (PT	O-152)				

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#### **DETAILED ACTION**

#### Non-Final Rejection

1. Applicant's election with traverse of Group II, claims 2, 8, 12 and 14 in the reply filed on 10/31/2005 is acknowledged. The traversal is on the ground(s) that the seach for any of Groups I-VI is not undue burden. This is not found persuasive because the groups comprise different inventions encompassing different enzyme cocktail detergents comprising different enzymes which have different modes of operations and different effects on different types of stains. To search and examine all these differences is undue burden on the examiner.

The requirement is still deemed proper and is therefore made FINAL.

- 2. Claims 1, 3-7, 9-11, 13, 15-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 10/31/2005.
- 3. Claims 2, 8, 12 and 14 are pending for examination purposes.
- 4. Claims 2 and 8 are independent.

## Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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## Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 7. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 8. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Hoshino et al. (US 5,312,561).

Hoshino et al. teach detergent compositions comprising an alkaline protease possessing a superior activity toward insoluble proteins, and exhibiting excellent detergency toward protein soils. See abstract. Hoshino et al. teach that there are no specific limitations as to the amount of the alkaline protease to be incorporated into the detergent compositions, so long as the amount of the incorporation permits the enzymes to exhibit their activity. A preferable range is 0.1-6,000 APU per 1 kg of the detergent composition, with a particularly preferable range being 5-400 APU. See col.11,ln. 5-10.

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Hoshino et al. teach that the composition comprises alkaline proteases other than the alkaline protease having the activity for hydrolyzing keratin fiber. Specifically, Hoshino et al. teach that the enzymes in the detergent composition hydrolyzates various proteins, including BSA, casein, meat/fish extracts and the like. See col.12,ln.10-30. Hoshino et al. illustrate in table 9, col.17, various ratios of protease that meet the broad range recited by the instant claim 8. Accordingly the teachings of Hoshino et al. anticipate the material limitations of the instant claim.

9. Claims 8, 12 and 14 are rejected under 35 U.S.C. 103(a) as obvious over Hoshino et al. (US 5,312,561).

Hoshino et al. are relied upon as set forth above. Hoshino et al. do not specifically teach a protease cocktail comprising proteases adapted to hydrolyzing ovalbumin, phosvitin or lipovitellin proteins as recited by the instant claim 8.

However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to arrive at a protease cocktail comprising proteases being adapted to hydrolyzing ovalbumin, phosvitin or lipovitellin proteins as recited by the instant claim 8, with a reasonable expectation of success and similar results because Hoshino et al. teach an alkaline protease cocktail for incorporation into detergent compositions for cleaning food soils including egg stains in general.

10. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Griffin et al. (US 5,312,749).

Griffin et al. teach proteases and laundry detergent compositions containing an appropriate amount of proteases to sufficiently degrade the proteinaceous contaminants

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likely to be present in soiled clothes. In general, the level of proteolytic activity for any given compositions will be in the range of about 10 to 15 enzyme units per milliliter of solution. See abstract and col.5,ln.12-30 and examples 1,7 and 8. Accordingly the teachings of Griffin et al. anticipate the material limitations of the instant claims.

11. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Sawayanagi et al. (US 5,387,518).

Sawayanagi et al. teach proteases are an essential component of detergents because they efficiently decompose proteinaceous dirt sticking to cloths. See col.1,ln.20-25. Sawayanagi et al. teach an alkaline protease and detergents containing the protease wherein the alkaline protease has: (1) an optimum pH of from about 11 to 11.5 as measured after reaction at 30.degree. C. for 10 minutes using casein as a substrate and an optimum temperature of about 60.degree. C. as measured after reaction at pH 10 using casein as a substrate. See abstract.

Regarding the material limitations of claim 8, Sawayanagi et al. teach that the alkaline protease hydrolyzes proteins such as casein, bovine serum albumin, ovalbumin, hemoglobin, and keratin. See col.10,ln.33-35. In tables 5-7 Sawayanagi et al. teach various protease enzymes having an activity greater than 0.1% as recited by the instant claim 8. In example 3, col.14, Sawayanagi et al. teach a detergent composition comprising an protease cocktail for treating dirty clothes. Accordingly the teachings of Sawayanagi et al. anticipate the material limitations of the instant claim.

12. Claims 8, 12 and 14 are rejected under 35 U.S.C. 103(a) as obvious over Sawayanagi et al. (US 5,387,518).

Sawayanagi et al. are relied upon as set forth above.

Sawayanagi et al. do not teach a protease cocktail comprising 2 proteases in the ratio recited by the instant claim 8.

However, it would have been nonetheless obvious to one of ordinary skill in the art, to arrive at a composition comprising 2 proteases in the ratio as recited by the instant claim 8, with a reasonable expectation of success and similar results, because Sawayanagi et al. teach a composition comprising alkaline proteases which hydrolyze casein and ovalbumin (see col.10,ln.33-35) and furthermore, it is reasonable to presume that said limitations to the broad ratio range of 2 proteases would have been obviously encompassed by the prior art teaching of Sawayanagi et al. since Sawayanagi et al. teach the use of alkaline proteases from more than one microorganism (see col.4,ln.42-65) in general.

#### Conclusion

- 13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Remaining references cited but not relied upon are considered to be cumulative to or less pertinent than those relied upon or discussed above.
- 14. Applicant is reminded that any evidence to be presented in accordance with 37 CFR 1.131 or 1.132 should be submitted before final rejection in order to be considered timely.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Preeti Kumar whose telephone number is 571-272-1320. The examiner can normally be reached on M-F 9:00am - 5:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra N. Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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(YUGENDRA N. GUPTA SUPERVISORY PATENT EXAMINEP TECHNOLOGY CENTER 1700